Part 1– Amended Claims

63. (Amended) A catheter for insertion into a urethra to perform a therapeutic heat treatment of a prostate which surrounds a prostatic urethra to enlarge a urine drainage passage through the prostate from a urinary bladder into a urethra of a human being, comprising:

an antenna located at a position within the catheter adjacent to the prostatic urethra and the prostate upon insertion of the catheter into the urethra to a treatment position at which the treatment is performed, the antenna for emitting electromagnetic radiation into the prostate to heat therapeutically with the emitted radiation a portion of the prostate surrounding a portion of the prostatic urethra;

an expandable reservoir within the catheter surrounding the antenna and located to extend along a portion of the prostatic urethra upon positioning the catheter in the treatment position, the reservoir for containing liquid and expanding in radial size relative to adjoining portions of the catheter upon pressurizing the liquid within the reservoir, the extent of radial expansion of the reservoir being sufficient to compress tissue adjacent to the reservoir and reduce blood flow through the compressed tissue to reduce the transmission of heat by blood flow away from the compressed tissue;

the expandable reservoir confining the liquid to absorb heat from the antenna and from a portion of the electromagnetic radiation emitted from the antenna, the reservoir having a capacity for conductively transmitting sufficient heat from the liquid to heat therapeutically a first region of tissue immediately adjoining the expanded reservoir, the reservoir and the liquid having a capacity for transmitting sufficient electromagnetic radiation emitted from the antenna to heat therapeutically a second region of tissue located beyond the first region from the reservoir, the capacity for therapeutically heating the first and second tissue regions being sufficient to cause tissue necrosis in the first and second regions and enlarge the urine drainage passage; and

a channel extending within the catheter from a position at an exterior of the urethra and communicating with the expandable reservoir for conducting pressurized liquid into the reservoir.

70. (Amended) A catheter for insertion into a urethra to perform a therapeutic heat treatment of a prostate which surrounds a prostatic urethra to enlarge a urine drainage passage through the prostate from a urinary bladder into a urethra of a human being, comprising:

an antenna located at a position within the catheter adjacent to the prostatic urethra and the prostate upon insertion of the catheter into the urethra to a treatment position at which the treatment is performed, the antenna for emitting electromagnetic radiation into the prostate to heat therapeutically with the emitted radiation a portion of the prostate surrounding a portion of the prostatic urethra;

an expandable reservoir within the catheter surrounding the antenna and located to extend along a portion of the prostatic urethra upon positioning the catheter in the treatment position, the reservoir for containing liquid and expanding in radial size relative to adjoining portions of the catheter upon pressurizing the liquid within the reservoir, the extent of radial expansion of the reservoir being sufficient to compress tissue adjacent to the reservoir and reduce blood flow through the compressed tissue to reduce the transmission of heat by blood flow away from the compressed tissue;

the expandable reservoir confining the liquid to absorb heat from the antenna and from a portion of the electromagnetic radiation emitted from the antenna, the reservoir having a capacity for conductively transmitting sufficient heat from the liquid to heat therapeutically a first region of tissue immediately adjoining the expanded reservoir, the reservoir and the liquid having a capacity for transmitting sufficient electromagnetic radiation emitted from the antenna to heat therapeutically a second region of tissue located beyond the first region from the

reservoir, the capacity for therapeutically heating the first and second tissue regions being sufficient to enlarge the urine drainage passage;

a channel extending within the catheter from a position at an exterior of the urethra and communicating with the expandable reservoir for conducting pressurized liquid into the reservoir; and

a liquid temperature sensor positioned within the reservoir to sense the temperature of liquid within the reservoir.

72. (Amended) A catheter for insertion into a urethra to perform a therapeutic heat treatment of a prostate which surrounds a prostatic urethra to enlarge a urine drainage passage through the prostate from a urinary bladder into a urethra of a human being, comprising:

an antenna located at a position within the catheter adjacent to the prostatic urethra and the prostate upon insertion of the catheter into the urethra to a treatment position at which the treatment is performed, the antenna for emitting electromagnetic radiation into the prostate to heat therapeutically with the emitted radiation a portion of the prostate surrounding a portion of the prostatic urethra;

an expandable reservoir within the catheter surrounding the antenna and located to extend along a portion of the prostatic urethra upon positioning the catheter in the treatment position, the reservoir for containing liquid and expanding in radial size relative to adjoining portions of the catheter upon pressurizing the liquid within the reservoir, the extent of radial expansion of the reservoir being sufficient to compress tissue adjacent to the reservoir and reduce blood flow through the compressed tissue to reduce the transmission of heat by blood flow away from the compressed tissue;

the expandable reservoir confining the liquid to absorb heat from the antenna and from a portion of the electromagnetic radiation emitted from the antenna, the reservoir having a capacity for conductively transmitting sufficient heat from the liquid to heat therapeutically a first region of tissue immediately adjoining

the expanded reservoir, the reservoir and the liquid having a capacity for transmitting sufficient electromagnetic radiation emitted from the antenna to heat therapeutically a second region of tissue located beyond the first region from the reservoir, the capacity for therapeutically heating the first and second tissue regions being sufficient to enlarge the urine drainage passage;

a channel extending within the catheter from a position at an exterior of the urethra and communicating with the expandable reservoir for conducting pressurized liquid into the reservoir;

a carrier moveably positioned within the catheter, the carrier having a tip which penetrates into the prostate at a radial distance relative to the expandable reservoir upon extension of the carrier from the catheter when the catheter is in the treatment position; and

a tissue temperature sensor connected to the carrier to sense the temperature of the prostate tissue surrounding the reservoir at distance away from the expandable reservoir.